

Homeland Security Subcommittee on
Emerging Threats, Cybersecurity and Science and Technology field hearing:
“Emerging Biological Threats and Public Health Preparedness:
Getting Beyond Getting Ready”

Congressional Testimony
David R. Gifford MD MPH
July 21st, 2008

Congressman Langevin and committee members, as the Director of the Rhode Island Department of Health, an agency that is responsible for protecting and promoting the public’s health in Rhode Island, I would like to thank you for continuing to focus on our nation’s health and safety. This hearing today on “Emerging Biological Threats and Public Health Preparedness: Getting Beyond Getting Ready” is just another example of the attention by Congress to emergency preparedness that has helped us become better prepared. The events of the world have not only changed our mindset but have changed how we do our business in public health. I can confidently say that I believe we as a State and as a Nation are better prepared today to deal with a myriad of natural and unnatural biological threats that we may encounter [Attachment A]. This is due in large part to the funding and leadership provided by Congress and the Federal agencies whom have worked in close partnership with the states and local public health agencies.

All 50 states, the District of Columbia, five territories, three freely-associated states and three large metropolitan areas (New York City, Chicago, Los Angeles County) receive Public Health Emergency Preparedness funding from the Centers for Disease Control and Prevention (CDC) and Hospital Preparedness Program funding from the U.S. Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response (ASPR) through cooperative agreements. The CDC and ASPR cooperative agreements are the primary source of preparedness funding for state and territorial health agencies. Since 1999, the federal government has invested more than eight billion dollars in public health and health system preparedness at the state and local levels.

Public health agencies are often at the forefront of natural and unnatural events that impact our citizens. Core public health functions, such as disease outbreak investigations and prevention, are traditional responsibilities of state and territorial health agencies. Yet, health agencies play surprising – and critical – roles in all types of incidents. Natural disasters, environmental emergencies, infrastructure failures, foodborne outbreaks and mass acts of violence all have one thing in common – large numbers of people who must be protected.

State health agencies have used federal investments in public health and health system preparedness to not only prepare for biological threats which have a low probability of occurring, such as pandemic influenza or bioterrorism incidents, but to also enhance capacities, build new capabilities, and strengthen the overall public health infrastructure nationwide that can help us address more frequently encountered incidents that have a direct or indirect impact on the public’s health. Federal funding and requirements have

helped health agencies in 48 states plus the District of Columbia and Puerto Rico to adopt National Incident Management System (NIMS). NIMS is a systematic approach for seamless incident management at all levels of government. When responding to incidents, state and territorial health agencies follow the Incident Command System (ICS), an organizational structure that integrates operations, logistics, planning, finance/administration, and command functions across all responders at the scene. The physical location where incident management activities are coordinated is the Emergency Operations Center (EOC). Depending on the scope of an incident, state health agencies may use their own agency-specific EOC or they may be integrated into the EOC of another entity, such as that of a state emergency management agency. In Rhode Island, we have determined that all employees should have an understanding of the ICS system since any employee of the RI Department of Health may be called on to respond in an emergency. Therefore, every employee at the Department of Health is required to be trained at an ICS level that is commensurate with their job duties and responsibilities.

Whether a federally-declared disaster or an everyday occurrence, state and local public health agencies are now able to respond faster and more effectively to meet the health and medical needs of their populations because of national emergency preparedness efforts. During the 2007 calendar year, nearly 90 percent of state health agencies were involved in a response that required activation of their Incident Command System or participation in an Emergency Operations Center. More than a quarter did this six times or more. Emergency preparedness and response has become an integral service provided by state and territorial health agencies. Attachment B provides a brief description of some of the types of responses by our nation's health departments in the past year to such threats as weather related disasters (e.g., floods, hurricanes, blizzards, tornados, etc), infectious disease outbreaks (e.g., meningitis, measles, mumps, or TB), food borne illnesses (e.g. salmonella, e-coli, etc), drinking water contamination (e.g. salmonella), technology disasters (collapsing bridges, dam/dike failures), acts of terrorism or acts of violence (e.g. Virginia Tech shootings). In RI, we have had to respond to several highly significant disease outbreaks, food born illnesses, contaminated drinking water and weather related events, using our ICS. The funding for emergency preparedness has made us much more effective in our response to these situations; and our response to these situations has in turn made us much more effective for other potential emergencies.

Over the course of the past few years, the Department of Health has utilized the Incident Command System (ICS) on average every 3 months. The department maintains a low but appropriate threshold when determining whether to utilize ICS to respond to a health care issue or incident. Therefore, the ICS structure has been utilized not only in major regional incidents such as the Mycoplasma outbreak in January 2006, but it also has been utilized in less widespread events such as the recent large scale TB skin testing at the Central Falls High School as part of an outbreak investigation and a hepatitis A exposure related investigation, leading to immunization of a large number of restaurant workers at two local restaurants. Not only has this allowed us to be more efficient and effective in our response but has provided us an opportunity to train HEALTH staff and improve our ability to utilize ICS. Consistent use of the ICS system when responding to major infectious disease outbreaks has built ICS skills and teamwork within the various units of

the Department of Health that will assist in future disease outbreak responses that are either natural (e.g. pandemic) or unnatural (e.g. bioterrorism).

Emergency preparedness funds and requirements have helped us develop stockpiles of critical equipment and supplies intended for use in a large scale incident such as a bioterrorism event or pandemic and have been invaluable in helping our Department respond to highly significant but smaller scale events. Our Department has utilized supplies stockpiled in response to public health emergencies such as a Mycoplasma related outbreak and the Central Falls High School TB outbreak. There have been enormous logistical benefits realized for responding in an expedient and efficient manner to such events, leveraging statewide and departmental resources when the core unit responding to the situation had exhausted its resources. The Department of Health has created and equipped an operations center within the Cannon Building that can be utilized when responding to any public health emergency that does not rise to the level requiring activation of the state EOC. In addition another room in the Cannon Building has been equipped with phone lines and data ports that are utilized to house the department's emergency hotline system. These resources are possible because of Federal funding and are utilized on a regular basis by response personnel, which as a result not only helps provide better care to the citizens of Rhode Island during health related events but also make us better able to respond should we have some unusual natural (e.g. influenza pandemic) or unnatural incident (e.g. bioterrorism).

In Rhode Island, the Department of Health works in partnership not only with other state agencies such as the Emergency Management Agency, but also the health care provider community such as hospitals and the non-health care community such as schools, integrating them in our planning, training, and our responses to events that have either a direct or indirect impact on the public's health.

Using Federal funds, we have worked closely with hospitals to create a web based Hospital Capacity System which has provided the state with a significant resource when dealing with emergency situations. This system operates 24/7 and provides real time information concerning hospital bed capacity. In addition, this system supports an event calendar that details upcoming statewide trainings, exercises and drills. In addition, interoperable communication mechanisms are being utilized on a daily basis by hospitals within the state. The hospitals currently have 6 redundant forms of communication. There will soon be an additional system with the addition of the 800 MHz radios. Their daily use ensures that the system will be utilized correctly and effectively during a major health incident.

Funds available through the Federal emergency preparedness grants have permitted significant upgrades and modernization of state laboratory equipment. The Division of Laboratories has been able to introduce rapid molecular methods of biological agent detection and a whole array of chemical detection equipment. These gains enhanced not just preparedness for emergencies, but also day-to-day laboratory operations. This equipment and training has also been used to help us better test for Pertussis (whooping cough) and mercury in cord blood. Such capacity development not only helps us serve to

contribute to public health laboratory functions, thus benefits the public's health but also keeps our staff proficient, trained and ready to use the equipment whenever required. For example, we were able to respond recently to a "credible" white powder incident and provide an answer in a matter of hours, confirming that the powder was not one of several possible biological agents (e.g. anthrax) or biotoxins/poisons (e.g. ricin). This was only possible because of the equipment and training provided by emergency preparedness grants as well as the coordination we have with the FBI and other Law Enforcement agencies required to be developed through emergency preparedness training activities.

We work with each municipality in RI to support a point of distribution (POD) plan that enables them to distribute medication or administer vaccines to their entire population. As part of a Medical Emergency Distribution System (MEDS) plan we provide municipalities with "Go Kits" to be used at Point of Distribution (POD) locations. "Go Kits" are a conglomeration of supplies that would serve to facilitate the operation of an established POD site in a municipality that has been tasked to dispense medication. The "Go Kits" contain such items as office supplies (pens, highlighters, clipboards, etc), cleaning supplies (paper towels, garbage bags, etc), crowd control/information dissemination items (bullhorn, whistles, lanterns, etc), medical supplies (disposable thermometers, stethoscope, etc), sign holders, communications devices (weather band radio, two way radios, etc), and logistical support/utility devices (batteries, extension cords, etc).

We have developed in partnership with the RI Disaster Medical Assistance Team (DMAT) and the Medical Reserve Corp (MRC), a database called State Emergency Registration of Volunteers in RI (SERVRI). The triad of resources from SERVRI, MRC and DMAT is called "RI Responds" and has the capacity to register, verify and mobilize health and medical volunteers in an emergency response scenario. "RI Responds" is an advanced registration system utilizing a secure database of verified information provided by healthcare professionals who have expressed an interest in assisting in the event of a public health emergency or other disaster requiring trained medical professionals. Once registered, volunteer professional information is immediately verified prior to an emergency, so that healthcare professionals may be deployed quickly and efficiently. When a decision is made to request the services of emergency volunteers registered within the system, they are presently notified manually (via email and telephone). With maintenance of Federal funds we will be able to upgrade the system to include an automated two way alert system. Volunteers will be able to receive instructions for response, when activated during a significant disaster or public health emergency, through the electronic notification system (ENS) that will be procured to facilitate deployment and utilization of all volunteers found within the database. This ENS system will also link to our program for tracking the deployment activations and locations of "RI Responds" volunteers to provide a comprehensive management tool.

The Department of Health has established a standing internal Special Populations Emergency Preparedness Workgroup (SPEP). The Special Populations Work Group is charged with (1) making recommendations about our Emergency Response Plan to reflect the needs of special populations (2) coordinating activities related with special

populations during public health emergencies and (3) participating in the Incident Command Structure. We also work with the Minority Health Promotion Centers (community-based organizations targeting primarily racial and ethnic minority populations) to assess community and agency preparedness for risk communication and response to public health emergencies.

We have worked in partnership with the Rhode Island Emergency Management Agency, to create and implement a Special Needs Emergency Registry. This registry targets Rhode Islanders with disabilities, chronic conditions and/or other special healthcare needs. The primary objective of the registry is to develop a reliable system for the identification of Rhode Islanders who require special assistance during emergency events by collecting key information for use by emergency personnel to plan and respond to emergency events. Populated through the submission of online or paper enrollment forms, the system is being developed with the capability to generate electronic reports for individual city and town use for emergency planning and response and will be activated by the operation of the Incident Command System. Currently 20% of the total state's population fall into the 5 areas the registry covers: Life support: includes dialysis, respirators, oxygen; Mobility; Hearing /visual related issues; Cognitive issues; Mental health related issues. To date the registry has reached approximately 3,500 people.

Summary

Public health agencies are often at the forefront of natural and unnatural events that impact the health of our citizens. Health agencies play a critical role in all types of incidents: natural disasters, environmental emergencies, infrastructure failures, foodborne disease outbreaks and mass acts of violence, all of which have public health impacts. The CDC and ASPR cooperative agreements are the primary source of preparedness funding for state and territorial health agencies but the proposed funding for the ASPR cooperative agreement is 25 percent less over the same time period (see attachment C).

State health agencies have used Federal investments in public health and health system preparedness to not only prepare for those threats which have a low probability of occurring such as pandemic influenza or bioterrorism events but to also enhance capacities, build new capabilities, and strengthen the overall public health infrastructure nationwide that can help us address more frequently encountered incidents that have a direct or indirect impact on the public's health. Strained economic conditions across the country combined with steadily decreasing Federal funding for public health and health system preparedness threaten the progress that state and territorial health agencies, along with their local, tribal and federal counterparts, have made within the last decade.

Rhode Island has used these funds to build capacity in both personnel training and equipment purchase both internally within the Department and with key partners in the community to not only be better prepared to respond to biological threats but to all types of natural and unnatural incidents as well as enhancing capacity for our core activities. Without this support, we would not have been able to address several health incidents as effectively or efficiently. As you consider reauthorizing funds for these programs, I

would recommend that you consider what you have heard here today to not only make decisions on the funding level but on the requirements related to the use of these funds. Hopefully my testimony has highlighted the importance of supporting an all hazards approach to preparedness, not restrictions that focus just on pandemic or specific biological threats. Similarly, the training and equipment supported by these funds must be incorporated into the routine activities of the agencies and tested on a regular basis. Otherwise they are much less likely to be utilized or effective when an unusual incident occurs. I have heard the military say one “should train the way you fight,” which applies aptly to emergency preparedness.

In conclusion, I would like to thank you and the committee for their continued support in ensuring that the nation is as best prepared as possible to respond to incidents impacting the public’s health. The nation has made tremendous progress in a short amount of time but continued support is necessary to ensure that we continue to have the ability to meet the challenges associated with each new event affecting the citizens that we serve.

State Health Agency Emergency Preparedness

All 50 states, the District of Columbia, five territories, three freely-associated states and three large metropolitan areas (New York City, Chicago, Los Angeles County) receive Public Health Emergency Preparedness funding from the Centers for Disease Control and Prevention (CDC) and Hospital Preparedness Program funding from the U.S. Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response (ASPR) through cooperative agreements. The CDC and ASPR cooperative agreements are the primary source of preparedness funding for state and territorial health agencies. Since 1999, the federal government has invested more than eight billion dollars in public health and health system preparedness at the state and local levels.

The CDC began funding several state health agencies in 1999 and expanded its cooperative agreement to 62 grantees following the September 11, 2001 terrorist attacks and the anthrax attack that soon followed. The CDC Public Health Emergency Preparedness cooperative agreement supports more than 3,500 state and local public health agency staff working on preparedness activities nationwide. Funding under the ASPR Hospital Preparedness Program cooperative agreement to the same 62 jurisdictions began following the 2001 terrorist attacks. While CDC and ASPR distribute preparedness funds to state and territorial health agencies and four large local health departments, 75 percent of the funds directly or indirectly support local public health departments and hospitals. State health agencies use ASPR cooperative agreement funds to support preparedness activities for more than 5,000 hospitals nationwide. Additionally, state health agencies provide non-financial support to many of the local health departments and other partners within their jurisdictions. According to a National Association of County and City Health Officials (NACCHO) survey of local health departments, “64 percent received technical assistance for planning; 56 percent received laboratory support; 55 percent received surveillance support; and 53 percent received support for exercise planning and administration.” Thus, federal public health and health system preparedness funds are used to improve response capabilities at all levels in communities across the country.

State health agencies have used this investment in public health and health system preparedness to enhance capacities, build new capabilities, and strengthen the overall public health infrastructure nationwide. This investment has paid off. Whether a federally-declared disaster or an everyday occurrence, state and local public health agencies are able to respond faster and more effectively to meet the health and medical needs of their populations.

State and territorial health agencies have played integral roles in responding to a wide range of emergencies. In 2007 alone, there were 63 federally-declared disasters and health agencies played a role in responding to almost all of them. During the 2007 calendar year, nearly 90 percent of state health agencies were involved in a response that required activation of their Incident Command System or participation in an Emergency

Operations Center. More than a quarter did this six times or more. Emergency preparedness and response has become an integral service provided by state and territorial health agencies.

Public health agencies are often at the forefront, just as anyone would expect. Core public health functions, such as disease outbreak investigations, are traditional responsibilities of state and territorial health agencies. Yet, health agencies play surprising – and critical – roles in all types of incidents. Natural disasters, environmental emergencies, infrastructure failures, foodborne outbreaks and mass acts of violence all have one thing in common – large numbers of people whose health must be protected.

Health agencies at the state, territorial, local, tribal and federal levels are incorporating emergency management principles into their activities to be consistent with the National Response Framework (NRF). The NRF details response principles, roles and structures for all-hazards national response and how they should be applied at the state, local, tribal and federal levels as well as by private sector and nongovernmental partners. Health agencies in 48 states plus the District of Columbia and Puerto Rico have reached National Incident Management System (NIMS) compliance certification. NIMS is a systematic approach for seamless incident management at all levels of government. Incidents are natural or manmade occurrences or planned events that require a response to protect lives or property. When responding to incidents, state and territorial health agencies follow the Incident Command System (ICS), an organizational structure that integrates operations, logistics, planning, finance/administration, and command functions across all responders at the scene. The physical location where incident management activities are coordinated is the Emergency Operations Center (EOC). Depending on the scope of an incident, state health agencies may use their own agency-specific EOC or they may be integrated into the EOC of another entity, such as that of a state emergency management agency. In most states, the health department is the lead agency for Emergency Support Function 8 (ESF-8), meaning they are responsible for health and medical resources during an incident. Health agencies may also support some of the other 15 total functions, such as ESF-6, which is mass care, or ESF-10, which is oil and hazardous materials response. With trained staff who understand NIMS, health agencies are able to work side-by-side with their response partners, regardless of agency or jurisdictional boundaries.

Public Health Preparedness in Action: Examples from Other State or Local Health Agencies

State and territorial public health agencies and the healthcare system are stronger today because of the investment in preparedness. State and territorial health agencies make a difference every day in protecting the health and preserving the lives of Americans across the country. Using federal cooperative agreement funds provided through the Center for Disease Control (CDC) Public Health Emergency Preparedness Program and the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program, state health agencies strategically invest in personnel, equipment, supplies and training that are drawn on during critical incidents, whether they are infectious disease outbreaks, natural disasters, or foodborne outbreaks and nationwide product recalls. Public health agency personnel work with their response partners every day in all types of incidents and are therefore always simultaneously preparing for disaster through an all-hazards approach to emergencies.

These are just some of the high profile examples from last year.

Disease Outbreaks

Recognition and response to agents of bioterrorism are predicated upon effective foundations of disease surveillance, outbreak investigation and response. These are core elements of public health practiced daily by Departmental units of clinical epidemiology and infectious disease.

Mycoplasma pneumoniae - When five children in the community were diagnosed with severe neurological illnesses, the [Rhode Island Department of Health](#) [RIDOH] stopped a worrisome infectious disease cluster in its tracks by activating ICS and its mass dispensing plan to provide antibiotics to more than one thousand at-risk individuals, launching an extensive public risk communication effort, and closing schools to encourage social distancing to interrupt disease spread. In December 2006, RIDOH learned of five school-aged children with severe neurological illness, including one who died. The Rhode Island Department of Health contacted the Center for Disease Control (CDC) for assistance with the disease cluster on December 22, 2006. CDC laboratory testing confirmed the first positive results for *Mycoplasma pneumoniae* on December 29. *Mycoplasma* infection clusters are rare and there was an unusually large number of severe cases in a single school. As a precaution, the RIDOH activated Incident Command System (ICS) and with the assistance of State DMAT offered antibiotics via a mass dispensing clinic to all 275 students, 40 staff members and their families between December 31, 2006 and January 2, 2007. In total, 1,183 people received medication.

Operating within ICS, state health agency staff used the mass prophylaxis training they had received as part of their Strategic National Stockpile planning to dispense medication over the holiday weekend. One hundred percent of the affected population was accounted

for and many participated in voluntary blood testing. State health officials and CDC personnel reviewed medical records from the school clinic and interviewed students and staff. Health officials, including the state health director, also held community information sessions with parents to address their concerns and set up a telephone hotline and Web site for those seeking additional information. The school was closed until January 8, 2007 to interrupt the transmission of illness and so that five-day antibiotic treatment courses could be completed before students and staff returned to school.

Health officials also investigated reports of higher than normal absenteeism in other schools in the area. On January 4, 2007, RIDOH recommended the closure of three school districts, impacting 20,000 students and their families. This was a precautionary measure to control disease and give the state health agency and the CDC time to further investigate potential cases. The CDC is using this incident to study the social and economic effects of school closures as part of a community containment strategy in the event of an influenza pandemic.

RIDOH's success in containing this outbreak was, in part, due to the investments made in its Medical Emergency Distribution plan, risk communication strategy, and ICS training of all staff as part of its all-hazards approach to emergencies.

[Meningitis](#). When meningitis sickened ten young people and killed two, the [Chicago Department of Public Health](#) [CDPH] launched a mass vaccination campaign to boost coverage rates and provide years of health protection to more than 7,200 at-risk children. The Department also used the incident as an opportunity to test its mass vaccination planning.

By April 23, 2008, the city of Chicago had ten cases of group C meningococcal invasive disease and two deaths for the year. The city only had 13 cases in all of 2007. Meningococcal disease is a bacterial infection that can cause meningitis and infect other tissues. The two individuals who died of the disease in Chicago lived in an area of the city with a low compliance rate for receiving the new vaccine. CDPH decided to pre-empt the situation to avert a potential epidemic. To do so, they launched a mass vaccination campaign to accelerate vaccine coverage rates in the community. Focused on children aged 11 to 18, vaccination teams targeted 10,000 children in 50 Chicago schools. Staff from the CDPH and five suburban health departments administered vaccine to 7,213 children in two weeks. The vaccine coverage rate of more than 70 percent among the targeted population is an impressive improvement over the historic rate of 20 to 30 percent. No additional children died of the disease, and the success of the vaccine campaign will continue to protect the at-risk population from future outbreaks in the years to come.

In addition to protecting the community's health, CDPH seized on the opportunity to use the vaccine campaign to implement their mass dispensing and mass vaccination planning it has developed with support from the federal preparedness cooperative agreements. The ability to vaccinate or dispense medication to large numbers of people is one of the core capabilities that health agencies across the country are working to develop. Being able to

implement a mass vaccination or mass dispensing plan would be essential during a bioterrorism attack with an agent such as anthrax or smallpox or a natural disease outbreak such as pandemic influenza. *Prior to the heavy investment in public health preparedness, CDPH would not have been able to accomplish a response of this size in such a short amount of time.*

Drinking Water Contamination.

A system that supports early detection and response to potential threats to our drinking water supply are critical public health functions.

Salmonella - When the water distribution system for the city of Alamosa became contaminated with salmonella, sickening more than 400 people, the [Colorado Department of Public Health and Environment](#) [CDPHE] used all its resources to identify the source of the problem, provide extensive risk communications to the public, work with partners to implement a solution, and restore safe drinking water to homes and businesses. The first case of salmonella was reported in Alamosa on March 6, 2008. Through case interviews, epidemiologists discovered that breastfed infants were not getting sick while those fed formula mixed with tap water were. Laboratory samples collected from individuals, from water in homes and from businesses confirmed that the same strain of salmonella was present in all. Further investigation determined that the aquifer supplying the drinking water was not contaminated. Epidemiologists and water experts concluded that the source of salmonella was somewhere in the water distribution system.

On March 17, Alamosa County established its Emergency Operations Center (EOC) and CDPHE notified federal partners of the outbreak. CDPHE issued a bottled water order on March 19 and advised residents not to use their tap water. The health agency also activated its public information hotline and issued a mutual aid request for water experts. The state public health laboratory, with personnel and equipment supported by federal preparedness funding, conducted sampling for salmonella, total coliform bacteria and heavy metals. This was the first time the laboratory had to conduct testing for human and environmental outbreaks at the same time.

The Water Quality Control Division coordinated with the city to develop and implement a plan to flush the city municipal water system and conducted water sampling for bacteria and heavy metals before, during and after the system flushing. The division also provided guidance for water use during each stage of the system flush. CDPHE and the local Joint Information Center continually updated Web sites, issued news releases, developed information flyers and fact sheets, and worked with local officials to activate Reverse 911 to get the word out. Community volunteers delivered much of the information door-to-door.

The boil-water order was finally rescinded by CDPHE on April 11. As of April 30, there were 424 cases of salmonella, including 117 that were culture-confirmed. Twenty-two people were hospitalized and one death was attributed to the salmonella outbreak. The successful conclusion of this outbreak was made possible by the significant investment in

laboratory services, epidemiology, Incident Command System (ICS) and communication through emergency preparedness.

Natural Disasters

Natural disasters are predictably unpredictable in that we can be certain that they will occur varying by location, nature and severity. Natural disasters such as hurricanes, wildfires, earthquakes, tornados, snowstorms and floods can have catastrophic public health consequences and require a high level of preparedness.

Wildfires. Twenty-three wildfires struck southern California in October and November 2007. The wildfires caused ten deaths and 139 injuries, and forced the evacuation of 321,500 residents - the largest evacuation in California's history. The California wildfires were just one of 63 federally-declared disasters in 2007. State health agencies were on the front lines of most, if not all, of them. The **California Department of Public Health** (CDPH) responded to the wildfires immediately, deploying its 2,000 alternate care site bed cache to Qualcomm Stadium to support the primary shelter set up for evacuated residents. Health agency staff, including Director Mark Horton, were at Qualcomm Stadium to ensure the shelter operated smoothly and that medical needs were adequately met. At the same time, the CDPH coordinated evacuations from threatened healthcare facilities, including 12 nursing homes, two acute care facilities and a psychiatric hospital. Throughout the response, the CDPH provided critical information to local health agencies and providers through its Health Alert Network. When the fires were contained and people returned to homes and businesses, the CDPH and local health agencies evaluated drinking water systems potentially contaminated by the wildfires. Thanks to state health agency assets that were not available before the recent focus on preparedness, the CDPH now has increased capacity to respond to wildfires, earthquakes, hurricanes, tornados, blizzards and other natural disasters.

Snowstorms. When a record breaking snowstorm dropped over 2 feet of snow in October and knocked out power to 400,000 homes and businesses, some for as long as a week, the **New York State Department of Health** successfully partnered with local health agencies to protect residents of western New York from carbon monoxide poisoning, foodborne diseases, and other health threats while working with local hospitals to assure appropriate staffing by deploying volunteer nurses. The New York State Department of Health [NYSDH] activated its risk communication plan and jointly issued a press release with the New York State Emergency Management Office. The agencies cautioned the public on cardiac risks resulting from the physical exertion of shoveling snow, warned of carbon monoxide dangers due to the use of generators and alternate heating sources, reminded of the importance of the safe use of candles and heaters in preventing fires, and offered advice on the safety of refrigerated food unable to be kept cold due to electricity loss. As the extent of the storm damage became clear, NYSDH also issued advice for those with end-stage renal disease who might not be able to get to their dialysis treatments. Throughout the storm response, NYSDH monitored public water supplies, conducted water sampling, and provided guidance through county health departments to restaurants and food establishments on safe food handling. The state health agency activated its

Emergency Medical Volunteer Database to identify and deploy nurses from other parts of the state. Using CDC cooperative agreement funds, NYSDH set up the Database following the September 11 attacks. From the registry of 11,242 medical professionals throughout the state willing to volunteer during emergencies, the state health agency deployed nurses from unaffected areas of the state. The state-based Health Emergency Response Data System (HERDS) system was also widely used at the county level. The Erie County Health Department detected an elevated number of carbon monoxide exposures using HERDS. The Erie County Health Department worked with the media to publicize a carbon monoxide fact sheet.

Tornados. When a tornado killed 11 residents and destroyed the town of Greensburg, the [Kansas Department of Health and Environment](#) [KDHE] helped make the town habitable again by assuring access to health and medical services, restoring identities, and protecting residents and recovery workers from environmental and safety hazards. The Center for Public Health Preparedness was instrumental in helping to secure medical supplies, personal protective equipment and sanitation equipment for some of the response and recovery workers. One of the immediate needs of Greensburg residents was met by the Department's Center for Health and Environmental Statistics. The tornado destroyed approximately 95 percent of the town, including personal records such as birth and marriage certificates that people need to prove their identities. Set up at the Disaster Recovery Center, KDHE staff assisted Greensburg residents in filling out simple application forms that were printed and faxed to the Department's headquarters for overnight processing. KDHE reissued 355 birth and marriage certificates for Greensburg residents. The environmental component of the KDHE also played a major role. Staff from the Bureau of Air and Radiation inspected commercial and public buildings for asbestos. While not generally a health risk when used in building materials, asbestos can cause serious lung diseases if airborne particles from damaged buildings are inhaled. Bureau of Air and Radiation staff labeled risks with red tape to indicate the presence of asbestos. This triggered clean-up crews to use special precautions when removing debris within the marked boundaries. While the KDHE would have had the same responsibilities if the Greensburg tornado had occurred ten years earlier, what changed in 2007 was the way the Department was able to respond. Health agency staff trained in ICS with CDC preparedness funds were able to integrate into the emergency response structure alongside other responders such as police and firefighters who have been using Incident Command System (ICS) for years.

Floods. When flooding hit nine counties, the [Ohio Department of Health](#) [ODH] maintained statewide situational awareness to support local public health agency response efforts and test new surveillance systems. As in other states, ODH works with local health departments on preparedness planning. This collaborative effort was effectively tested during flooding in nine Ohio counties in August 2007. In Allen County, the local health department used its upgraded communications equipment to share information with state and local officials about flood damage and the needs of the community. Public information staff, whom had been trained with funding from the CDC cooperative agreement, worked with the media to get consistent health information to the public about building clean-up, mold prevention, and the appropriateness of tetanus and other

vaccines. Mass dispensing plans developed as part of Strategic National Stockpile preparations were used to rapidly set up a tetanus vaccine clinic using volunteers from the Medical Reserve Corps. Mutual aid agreements established with other local health departments enabled a more efficient response to calls for assistance. All of these tools enabled the Allen County Combined Health District to maximize its personnel and other resources and to effectively determine resource gaps to be filled by the ODH and other local health departments.

The flood also tested ODH's Real-time Outbreak and Disease Surveillance (RODS) System. RODS provides for real-time analysis of emergency department chief complaint data and over-the-counter drug sales information and may be useful for the early detection of clinical syndromes due to agents of bioterrorism. The system is used by more than 300 health department and hospital personnel to detect and track health events such as bioterrorism, outbreaks, influenza, and seasonal illness. Currently, more than 85 percent of Ohio's emergency department visits and approximately 70 percent of over-the-counter drug sales are captured and analyzed by the system.

Using chief complaint data from the RODS system, the ODH's Early Event Surveillance Unit's analysis found a statistically significant five-fold increase in chief complaints related to insect bites in the flooded region two weeks after the flooding began – the approximate amount of time it takes for a mosquito to reach maturity. Public health officials have long known that many diseases, such as West Nile virus, are spread among the human population by mosquito bites. They also know that standing pools of water, which are common following floods, are major breeding sites for mosquitoes and other insects.

Technological Disasters

The **Minnesota Department of Health** (MDH) activated its regional response plan following the August 2007 interstate bridge collapse that killed 13 and injured nearly 100. The MDH used its Health Alert Network, funded through the CDC cooperative agreement, to notify MDH staff, local health agencies, hospitals and emergency management partners of the bridge collapse, inform recipients to be ready to respond, and provide updates throughout the response. The MDH, hospitals and EMS used MNTrac, a decision-making tool implemented with ASPR cooperative agreement funds, to monitor ambulance runs, status of patients, and coordination of patient care transport and emergency room/trauma care. Based on information provided through MNTrac and the Health Alert Network, area hospitals activated their response plans and were able to handle all of the victims. Using its ESAR-VHP system, the MDH identified and credentialed behavioral health volunteers and provided their information to the City of Minneapolis and the family assistance center to be called upon to assist the victims, their families and first responders in the immediate aftermath and the weeks that followed. During the recovery phase, the MDH worked with environmental agencies to identify and assess potential health risks related to the air and water. *As our physical infrastructure ages, state health agencies will likely have to respond to more technological disasters.*

Foodborne Outbreaks

Foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations and 5,000 deaths in the US each year at a cost of \$5 billion. State and territorial health agencies use federal cooperative agreement funds to support foodborne outbreak response, including epidemiologists to conduct outbreak investigations, public health laboratory personnel and equipment to confirm outbreak causes and communications professionals to notify the public of risks.

In July 2007, the **Indiana Department of Health** and the **Texas Department of State Health Services** independently notified the CDC of suspected foodborne botulism cases. In both states, epidemiology staff investigated patient food histories to determine the cause of illness, laboratory staff tested patient and food samples, and health agency officials requested and distributed botulinum antitoxin from CDC. Once CDC confirmed botulism as well as the source, the FDA issued a consumer advisory and the manufacturer voluntarily recalled its canned chili products from about 8,500 retail outlets. State health agencies across the country engaged in extensive public education campaigns to get the products off store shelves and out of people's homes to prevent additional botulism cases. *Thanks to improvements made to the public health infrastructure with federal preparedness funding, state health agencies and their partners limited the botulism outbreak to eight cases in three states.*

Terrorism & Acts of Violence

In 2006, 20,000 deaths resulted from 14,000 terrorist attacks worldwide. The last acts of large-scale terrorism on US soil occurred in 2001, but major acts of violence continue to occur. After these events, state health agencies and the healthcare system must mobilize to protect lives while coordinating with law enforcement officials to preserve evidence.

The **Virginia Department of Health** (VDH) immediately responded when a gunman killed 33 and injured 27 others at Virginia Tech in April 2007. Using CDC cooperative agreement funds, the VDH had established five regional response teams as part of its statewide preparedness system. Under the Chief Medical Examiner, the VDH deployed three public information officers, a planner and a team of forensic scientists to assist the regional team already in place. With Assistant Secretary for Preparedness and Response (ASPR) cooperative agreement funds, the VDH set up Regional Healthcare Coordinating Centers in each of the state's six hospital regions. ASPR funds also support yearly upgrades to the WebEOC system installed in hospitals throughout Virginia, hospital staff training, purchase of redundant communications, and sustainment of the Regional Healthcare Coordinating Centers. Using the statewide Web Emergency Response Center (WebEOC) system, the VDH, hospitals, the 35 local health districts, and emergency management partners tracked the transport and condition of all injured victims, checked the diversion status of hospitals, and monitored and responded to resource needs of the affected hospitals. The VDH also provided risk communications to the public, identified victims, supported family services established by the university, and kept federal and international entities informed. *This tragic example is a reminder of the importance of*

coordinated, statewide public health and healthcare preparedness systems for rapid responses to mass casualty incidents.

While these incidents were among the most widely publicized of the last year, state and territorial health agencies respond to similar events around the country every single day. For more examples, please visit States of Preparedness on (Association of State and Territorial Health Officers) ASTHO's Web site at www.astho.org.

Attachment C.

Federal Budget Appropriation Declining

Continued cuts to state and territorial public health and health system preparedness programs threaten the ability of jurisdictions to respond as rapidly and effectively to future events as to those that occurred over the last year and a half. Lives have been saved and diseases and injuries have been prevented through the significant support that the federal government has provided public health agencies through the CDC and ASPR cooperative agreements. However, the proposed fiscal year 2009 budget calls for a funding level for the CDC cooperative agreement that is 33 percent less than in fiscal year 2005. The proposed funding for the ASPR cooperative agreement is 25 percent less over the same time period.

These continued funding decreases, combined with the difficult economic conditions in many states, will hinder the ability of state and territorial health agencies to sustain and continue the progress that has been made in public health and health system preparedness. State and territorial public health agencies are beginning to cut response personnel; limit opportunities for staff to train, plan and exercise with other first responders; lose their ability to maintain supplies and technology such as surveillance systems, laboratory equipment and communications devices; and decrease their capacity to produce and distribute public safety information. These changes will make it difficult for state and territorial health agencies to duplicate the successful responses seen to date. A sustained commitment to public health preparedness will ensure that health agencies will continue to be able to rapidly respond to all hazards by protecting the health and lives of the public.

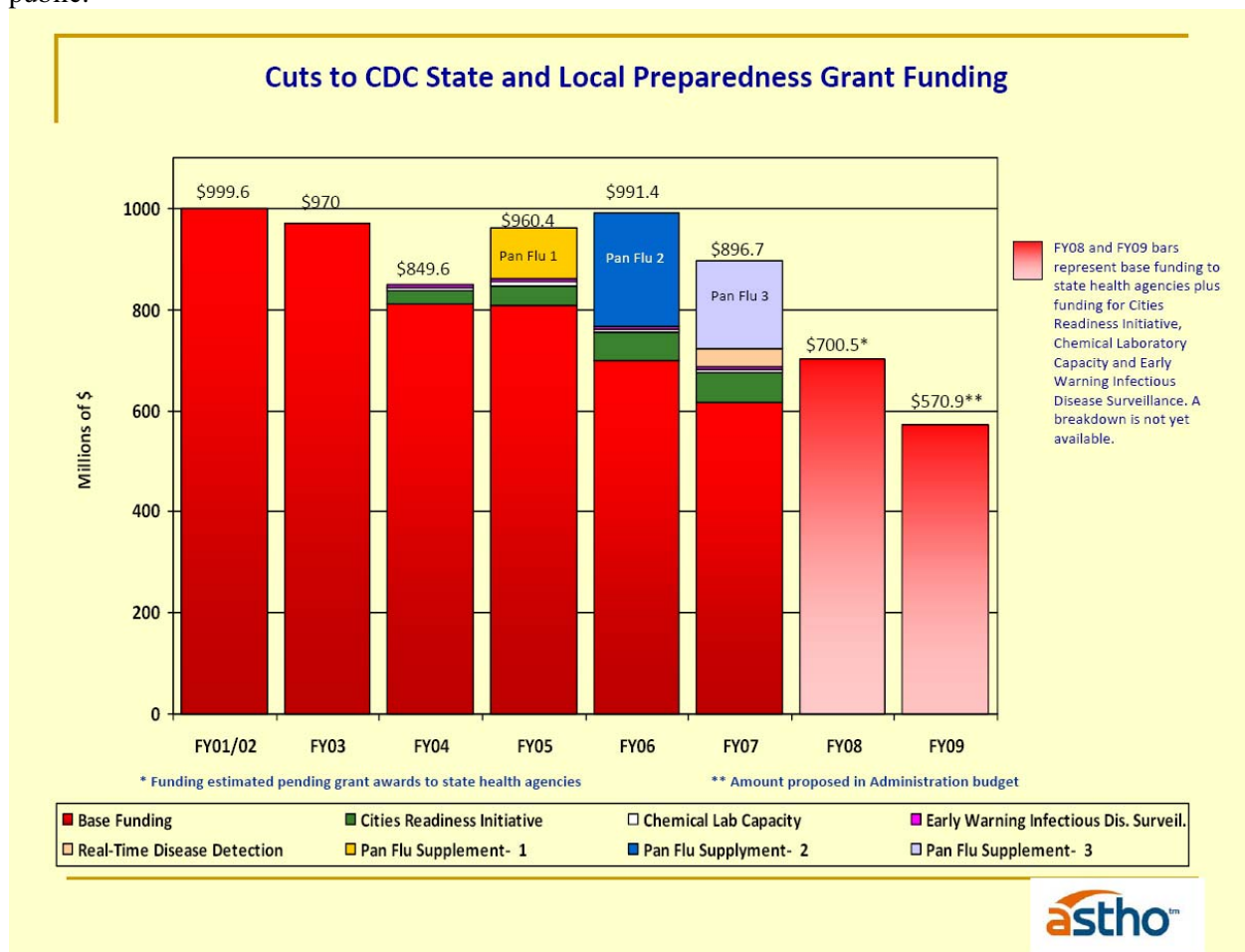


Figure 1. CDC Public Health Emergency Preparedness Cooperative Agreement Funding Trend.

Cuts to State ASPR Hospital Preparedness Grant Funding

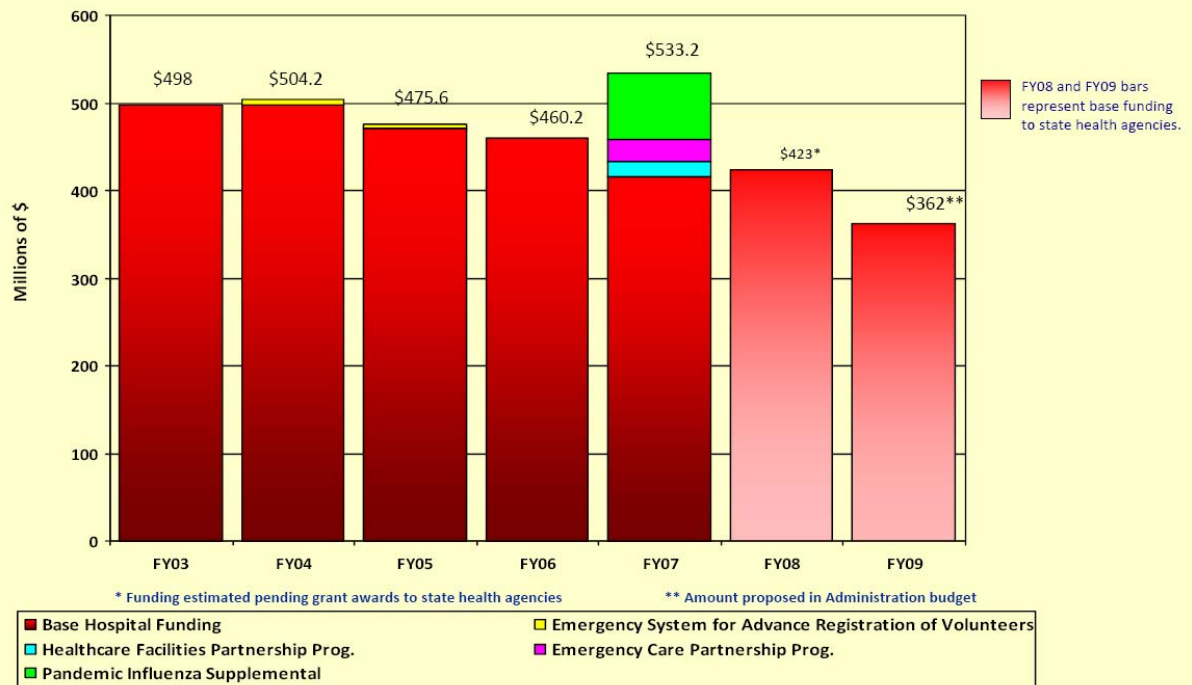


Figure 2. ASPR Hospital Preparedness Program Cooperative Agreement Funding Trend.